# Town of Danville Local Hazard Mitigation Plan

This Plan is being prepared as an Annex to the San Francisco Bay Area Regional Multi-Jurisdictional hazard Mitigation Plan.

#### Introduction

The Town of Danville is a moderately-sized community in Contra Costa County, California. The Town is located in the southern, central portion of the county on the SR 680 corridor. The Town has a current population of 43,052 people<sup>1</sup>. The Town's operating budget for FY2006-07 is \$22.5 million. The Town employs a full time staff of 117 people. The Town contracts with the Office of the Sheriff, Contra Costa County for its police services; and fire services are supplied by the San Ramon Valley Fire Protection District.

## **The Planning Process**

The Town has a General Plan Safety Element (Resources & Hazards – Chapter 5) that was last updated in 1999. The Safety Element includes a discussion of fire, earthquake, flooding, and landslide hazards. The Town adopted an Emergency Operations Plan that identifies how the Town will respond to natural or man-made emergencies, and fully complies with SEMS and NIMS. In addition, the Town routinely enforces the requirements of the California Environmental Quality Act (CEQA). The Town's effort in developing the local Hazard Mitigation Plan builds on these pre-existing programs and identifies gaps that may lead to disaster vulnerabilities in order to work on ways to address these risks through mitigation.

Many of the activities conducted by the Town were fed into the planning process to work within the structure of FEMA's guidelines and ABAG's Multi-Jurisdictional Plan. The Town participated in meetings and provided oral comments on the multi-jurisdictional plan. Finally, the Town provided information on facilities that are viewed as "critical" to the Association of Bay Area Governments (ABAG).

Key Town staff were involved in identifying and prioritizing mitigation strategies appropriate for the Town, including the Chief of Planning, Chief Building Official, Development Services Director, Police Chief and the Emergency Services Manager. Through this process, general priorities and appropriate Town departments were identified. Preliminary budgets and potential funding sources were subsequently developed for strategies designed as "High" priority.

The Town provided the opportunity for the public to comment on the mitigation strategies selected by Town staff at the Town Council meeting on March 6, 2007.

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<sup>&</sup>lt;sup>1</sup> For complete Census information on this city, see <a href="http://www.bayareacensus.ca.gov/">http://www.bayareacensus.ca.gov/</a>.

The resolution adopting the plan and strategies was on the March 6, 2007 Town Council agenda. The intent is to incorporate these strategies into the General Plan's Safety Element, upon its update.

#### Hazard and Risk Assessment

The ABAG Regional Multi-Jurisdictional Local Hazard Mitigation Plan, to which this is an Annex, lists nine hazards that impact the Bay Area. Five hazards are related to earthquakes (faulting, shaking, earthquake-induced landslides, liquefaction, and tsunamis) and four related to weather (flooding, landslides, wildfires, and drought).

The major risk for the Town of Danville is earthquake-related. The northern end of the Calaveras fault, which bisects the Town, generally following the route of Interstate Freeway 680.

The Town has developed GIS mapping systems that are used for multiple purposes and updated frequently. Additionally, the Town participates and shares mapping information with the San Ramon Valley Fire Protection District (SRVFPD) and the County of Contra Costa. Additional maps can he referenced by accessing ABAG's website at <a href="http://quake.abag.ca.gov/mitigation/disaster-history.html">http://quake.abag.ca.gov/mitigation/disaster-history.html</a>.

Information on disasters declared in Contra Costa County between 1950 to 2000 can be found on ABAG's Website at <a href="http://quake.abag.ca.gov/mitigation/disaster-history.html">http://quake.abag.ca.gov/mitigation/disaster-history.html</a>.

#### Urban Land

Hazard exposure for Danville was examined based on the information found on ABAG's website at http://quake.abag.ca.gov/mitigation/pickdbh2.html. Specific hazards that have the potential to affect the 11,567 urban acres in the Town are:

- ◆ Earthquake faulting there is one active fault running within the Town, so rupture of a fault is a direct concern. While 80 urban acres are located in the Alquist-Priolo Earthquake Fault Zone as mapped by the California Geological Survey, 32 of these acres are urban "open" and not developed.
- Earthquake shaking 10,751 acres are in the highest two categories of shaking potential, in large part because the Calaveras fault bisects the Town of Danville at or near Interstate 680.
- ◆ Earthquake-induced landslides the California Geological Survey has not completed mapping of this hazard in the Town of Danville. However, because few areas have been mapped as landslides, this hazard is viewed as similar to that posed by weather-related hazards.
- ♦ Earthquake liquefaction 3,703 acres are in areas of moderate, high, or very high liquefaction susceptibility.

- ◆ Tsunamis –Tsunamis are not a hazard in the Town of Danville. The Town is not located near any ocean or bay waterways.
- ◆ Flooding 252 acres are in the 100-year flood plain, while an additional 127 acres are in other flood-prone areas.
- Landslides 7,697acres are in areas of existing landslides.
- ♦ Wildfires 3,301 acres are subject to high, very high, or extreme wildfire threat, and 9,897 acres are in wild-land-urban interface threat areas.
- Dam Inundation 171 acres are subject to dam or reservoir inundation.
- Drought all 11,567 acres are subject to drought.

## Infrastructure

The hazard exposure for the Town's infrastructure was also examined, based on the information on ABAG's website at <a href="http://quake.abag.ca.gov/mitigation/pickdbh2.html">http://quake.abag.ca.gov/mitigation/pickdbh2.html</a>. Specific hazards that have the potential to affect the 207 miles of roadway in the Town are:

- ◆ Earthquake faulting One active fault runs within the Town, so rupture of a fault is a direct concern. While only 2 miles of roadway are located in the Alquist-Pirolo Earthquake fault Zone and mapped by the California Geological survey, several roads do cross the Calaveras fault and are likely to be closed if that fault ruptures.
- ◆ Earthquake shaking 165 miles of roadway are in the highest two categories of shaking potential.
- ◆ Earthquake-induced landslides the California Geological Survey has not completed mapping of this hazard in the Town of Danville. However, this is likely to be an issue because roadways are in existing landslide areas.
- ♦ Earthquake liquefaction 107 miles of roadway are in areas of moderate, high, or very high liquefaction susceptibility.
- ◆ Tsunamis Tsunamis are not a hazard in the Town of Danville. The Town is not located near any ocean or bay waterways.
- ◆ Flooding 6 miles of roadway are in the 100-year flood plain, while an additional 4 miles are in other flood-prone areas.
- ♦ Landslides 92 miles of roads are in areas of existing landslides.
- Wildfires while 18 miles of roadway are subject to high, very high or extreme wildfire threat, 189 miles of roads are in wild-land-urban interface threat areas.
- ◆ Dam Inundation 6 miles of roadway are in an area subject to dam inundation.
- Drought is not a hazard for roadways.

## **Critical Facilities**

Finally, the hazard exposure of critical health care facilities, schools, and Town-owned buildings were examined based on the information on ABAG's website at <a href="http://quake.abag.ca.gov/mitigation/pickcrit.html">http://quake.abag.ca.gov/mitigation/pickcrit.html</a>. Specific hazards that have the potential to affect the critical facilities in the Town are:

- ◆ Earthquake faulting One active faults runs within the town so rupture of a fault is a direct concern. However, no critical facilities are located within the Alquist-Priolo earthquake Fault Zone as mapped by the California Geological Survey.
- ◆ Earthquake shaking Sixty-one (61) of the critical structures within the Town of Danville are in the highest two categories of shaking potential.
- ◆ Earthquake-induced landslides the California Geological Survey has not completed mapping of this hazard in the Town of Danville. However, this is likely to be an issue because some critical facilities are in existing landslide areas.
- Earthquake liquefaction Fifty-eight (58) of the critical facilities are in areas of moderate, high, or very high liquefaction susceptibility.
- ♦ Tsunamis Not applicable.
- Flooding No critical health care facilities, schools, or Town-owned facilities are in either the 100-year flood plain or in other flood-prone areas.
- ◆ Landslides Nine (9) critical health care facilities, schools, or town-owned facilities are in areas of existing landslides.
- Wildfires Fifty (50) critical facilities are in wild land-urban interface threat areas.
- ◆ Dam Inundation Nine (9) critical health care facilities, schools, or townowned facilities are in an area subject to dam inundation.
- Drought Drought will not affect city buildings directly. However, the Town does not operate a water-supply distribution system.

In spite of the areas of Town located in flood-prone areas, there are no repetitive loss properties in the Town based on the information at <a href="http://quake.abag.ca.gov/mitigation/pickflood.html">http://quake.abag.ca.gov/mitigation/pickflood.html</a>.

Drought, though a potential problem in the Town, is not fully assessed. The Town will work with ABAG and various water supply agencies on this issue.

The Town plans to work with ABAG to develop specific information about the kind and level of damage to buildings, infrastructure, and critical facilities which might result from any of the hazards previously noted.

As these impacts are not fully developed, the Town has reviewed the hazards identified and ranked the hazards based on past disasters and expected future impacts. The

conclusion is that earthquake (particularly shaking), flooding, wildfire, and landslides (including unstable earth) pose a significant risk for potential loss.

## **Mitigation Activities and Priorities**

Through participation in the ABAG Regional Multi-Jurisdictional Planning process, Town staff helped develop and review the comprehensive list of mitigation strategies in the multi-jurisdictional plan. The list was discussed with key staff, and representatives and the Fire District and School District were invited to provide input. Prioritization of mitigation strategies was based on a variety of criteria, including: economic and cost-benefit analysis, being technically and administratively feasible, politically acceptable, socially appropriate, legal, economically sound, and not harmful to the environment or our heritage. The ultimate goal of this process is to create a greater resistance to disaster, within the region. Several of the strategies are existing Town programs.

The public was provided with an opportunity to comment on the priorities at the March 6, 2007 town Council Meeting. The intent is to incorporate these strategies into the General Plan's Safety Element, upon its update.

The Town examined the hazard exposure information to Town-owned critical facilities. Staff determined that it was a high priority to evaluate how best to upgrade and retrofit the buildings. These facilities include: the Town Offices, the Town Service/Maintenance Center, the Village Theater, the Town Meeting Hall, the Library and Community Center. All of these facilities would play a critical role in managing any disaster or major emergency event that occurs within the Town. Any upgrade or retrofitting work that was identified would need supplemental funding to complete the work. The Town would work to identify potential funding sources, including capital improvement budgets, bond issues and federal or state grants.

# The Plan Maintenance and Update Process

The Town Manager, the Chief of Planning and the Emergency Services Manager will ensure that monitoring of the Town's Local Hazard Mitigation Plan will be on an ongoing basis. However, the major disasters affecting our community, legal changes, notices from ABAG as the lead agency in this process, and other triggers will be used. Finally, the Plan will be a discussion item on the agenda of the meeting of Town Department Directors at least once a year, generally in April. At that meeting, the Department Directors will focus on evaluating the Plan in light of technological and political changes during the past year or other significant events. This group will be responsible for determining if the Plan should be updated.

The Town of Danville is committed to reviewing and updating this Plan at least once every five years, as required by the Disaster Mitigation Act of 2000. The Town Emergency Services Manager will contact ABAG four years after this plan is approved to ensure that ABAG will be undertaking the plan update process. If so, the Town

again will participate in the Multi-Jurisdictional Plan. If ABAG is unwilling or unable to act as the lead agency in the multi-jurisdictional effort, other agencies will be contacted, including the County's Office of Emergency Services. Counties should then work together to identify another regional forum for developing a multi-jurisdictional plan.

The public will continue to be involved whenever the Plan is updated and as appropriate during the monitoring and evaluation process. Prior to adoption of updates, the Town will provide the opportunity for the public to comment. A public notice will be posted prior to the meeting to announce the comment period and meeting logistics.